

Bremo Power Station Water Treatment

Here at Bremo Power Station is part of our transition to cleaner energy we're closing our coal ash ponds in order to do that we need to remove the water and then treat it test it before releasing it to the James River we have a state-of-the-art treatment system here that will treat that water to ensure its protective of the river because we live here too we enjoy the river we play in the river we fish we swim and we want to make sure that that resource is protected and there for us to enjoy for many years to come using a series of pumps who will pump the surface water from the ponds that water comes into the system into the first tank where we aerated we essentially pump air through it and we adjust the pH raising it to about 9.5 both those steps cause the constituents in the water to start to become little pieces of sediment little particles that are separate from the water in the mixing tank all those particles that we got two separate in the first step in the second step we add a chemical that causes them all to stick together now we have a solid material that could be removed from the water so from there the solids that were removed they go into a container called a filter press there they get squeezed to remove excess water which then goes back to the beginning of the treatment line to be treated all over again the water that continued on the clear water after the solid settled out they go on to a series of three filters and each filter is a smaller opening than the one before it to remove any additional particles that didn't clump together during the settling stage the next step it goes into a tank where we adjust the pH again since we raise the pH at the beginning of the treatment we have to lower it back down to ensure that it's at a protective level for the river the water is transferred to four nine hundred fifty thousand gallon tanks or each one's about one and a half Olympic swimming pools and water is being tested as it goes into those over about a 12-hour period to fill one tank once we've tested and we've confirmed through our third-party analysis that the water is safe for release into the river then we will do so and release it at a gradual rate however if the results indicate that it is not at the appropriate standard we have the ability to research related back to the beginning of the line and treat it all over again it's the beauty of our system it's an ultimate protection.